

1/5

FIG. 1

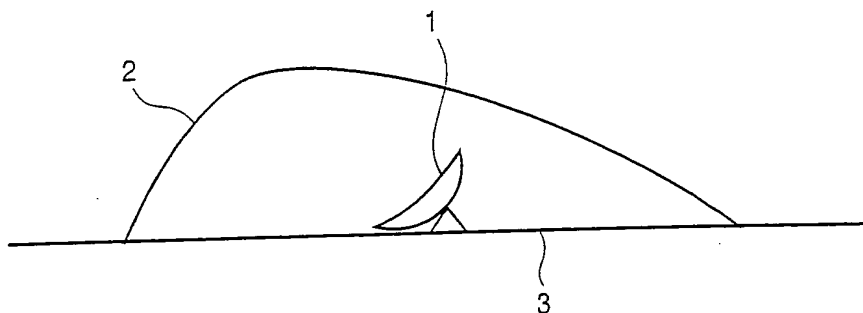
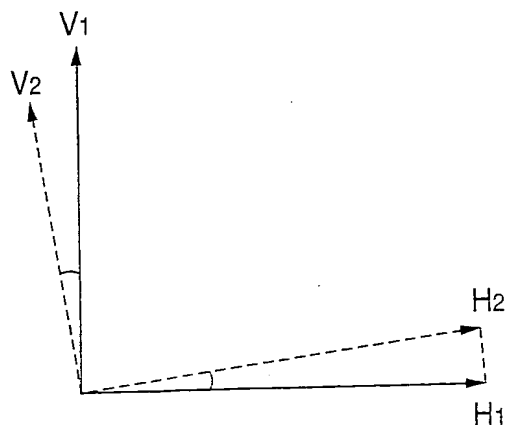


FIG. 2



2/5

FIG. 3

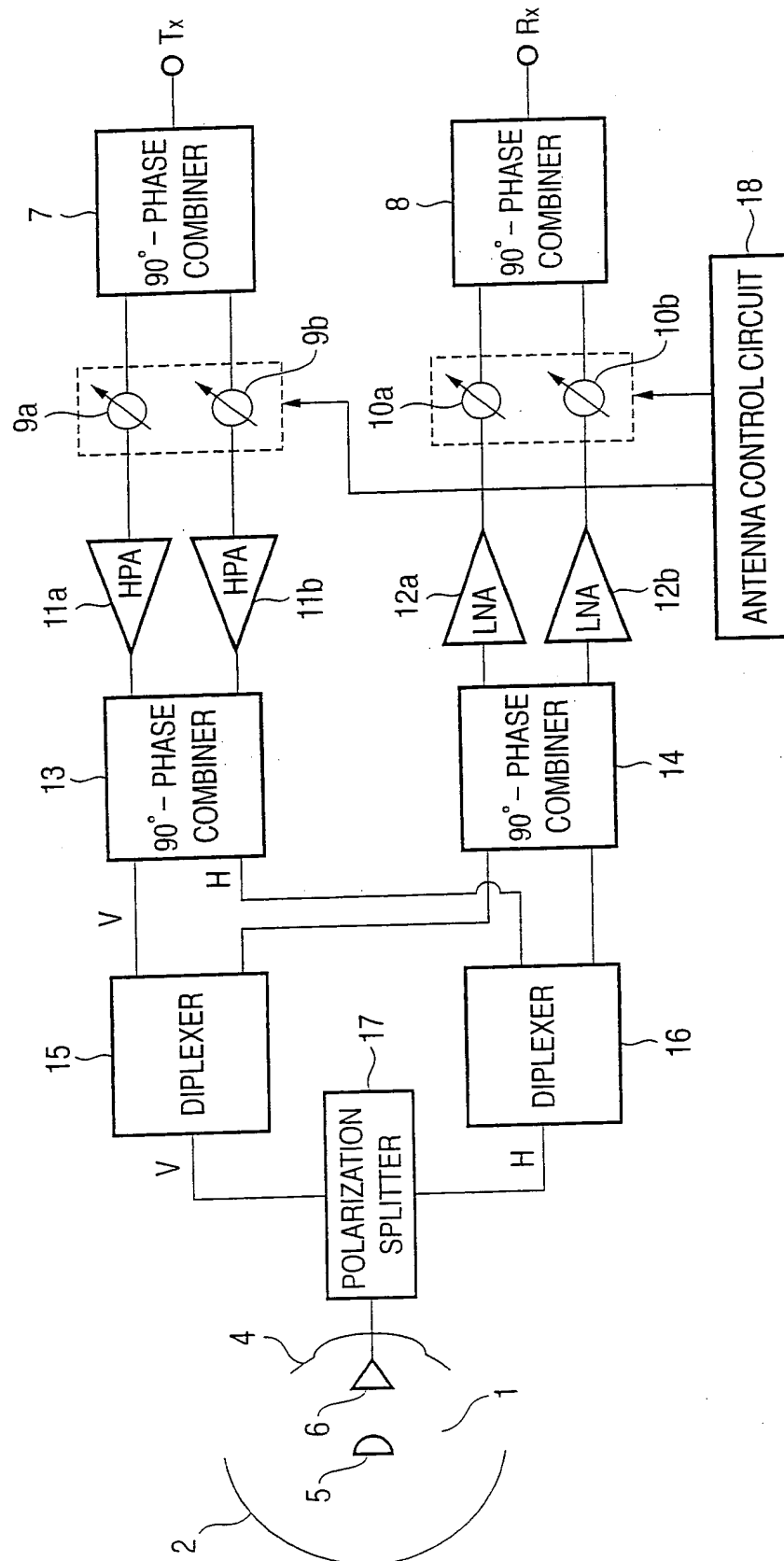
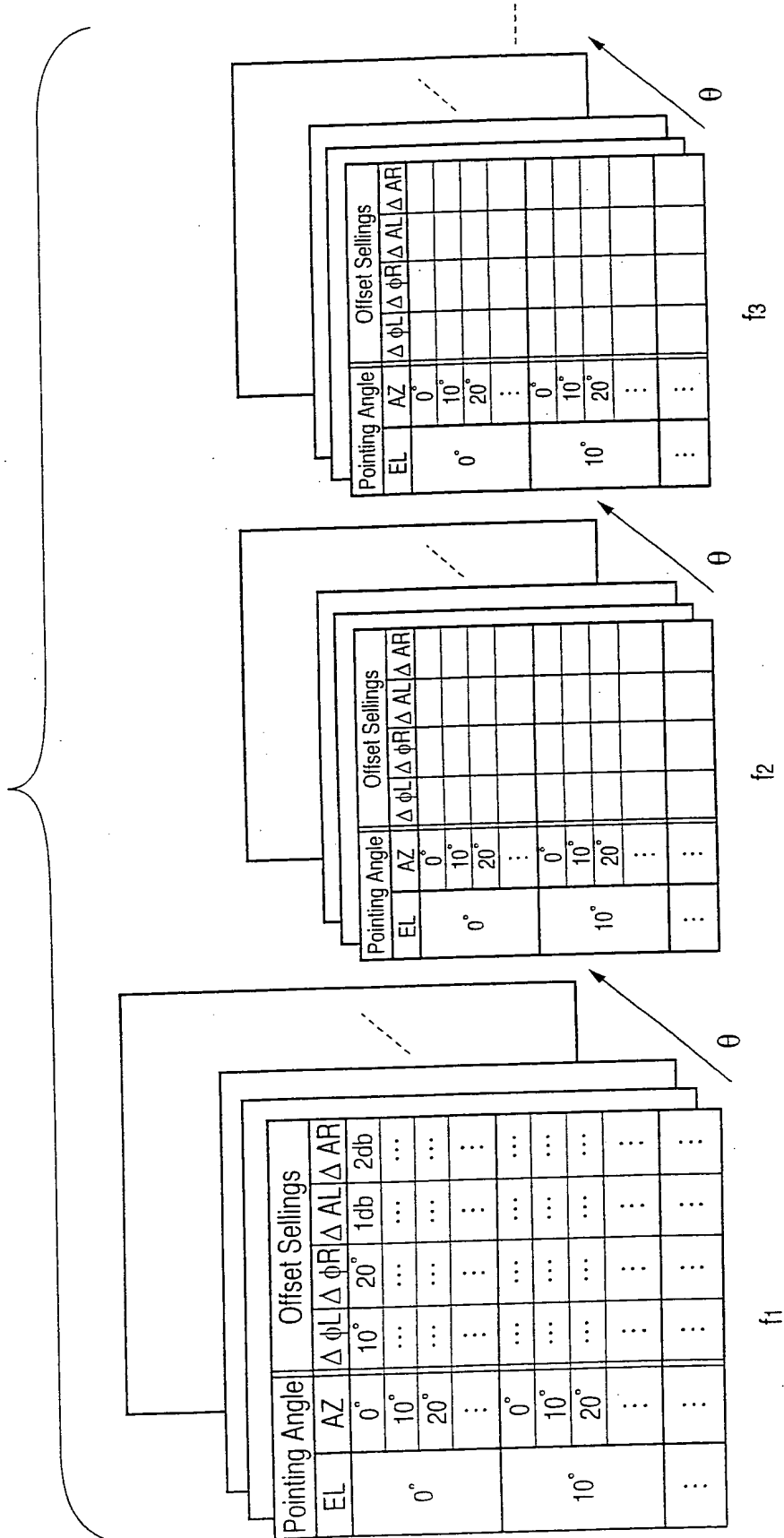


FIG. 4 is a block diagram of a radar system. The system includes a transmit path (left) and a receive path (right), both utilizing 90° phase combiners (7, 8), diplexers (13, 14), and amplifiers (HPA 11a, 11b; LNA 12a, 12b). A polarization splitter (15) and a polarizer (16) are used for polarization control. The transmit path output is labeled Tx (21) and the receive path input is labeled Rx (20). The system also includes a control unit (104) that manages the radar operation. A feedback loop (109) provides phase error signals ($\Delta \phi_L, \Delta \phi_L', \Delta \phi_R, \Delta \phi_R'$) to an amplifier correction table (102) and a satellite tracking function (103). The control unit also manages the antenna gain table (106) and the radome correction table (101). The radome correction table (101) provides correction factors ($\Delta \phi_L, \Delta \phi_L', \Delta \phi_R, \Delta \phi_R'$) to the amplifier correction table (102) and the antenna gain table (106). The antenna gain table (106) provides gain factors ($\phi_L', \phi_L, \phi_R', \phi_R$) to the antenna gain (107) and the radome loss table (105). The radome loss table (105) provides loss factors ($\phi_L', \phi_L, \phi_R', \phi_R$) to the antenna gain (107) and the radome correction table (101). The antenna gain (107) and the radome loss table (105) are used to calculate the effective isotropic radiated power (EIRP) instruction (108). The system also includes a radome correction data storage medium (22) that stores correction data.



5/5

FIG. 6

